## **ABSTRACT**

A hermetic compressor has a bipolar permanent magnet motor where permanent magnet is disposed in a rotor core. A hollow bore is disposed at the end on the compressing element side of the rotor core, and a main bearing extends into the bore. The thickness of the rotor core is longer than that of the stator core, thereby widening the magnetic path of the rotor core. The magnetic flux amount generated in the rotor core, which is conventionally insufficient due to existence of the bore, increases, the loss decreases, and the efficiency increases.